

3/8/11 PUBLIC HEARING PLANNING BOARD ARTICLE FOLLOW UP MATERIALS

- Planning Board Article Markups - General Comments / Discussion from 3/8/11 Public Hearing
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**PLANNING BOARD ARTICLE MARKUPS
GENERAL COMMENTS / DISCUSSION
FROM 3/8/11 PUBLIC HEARING**

Article 1 – Zoning: Grade Plane Definition

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Section II., Definitions, Subsection B.**, as follows:

489. “**GRADE PLANE**” means a reference plane representing the average of the finished, existing, undisturbed ground levels adjoining a *building* or *structure* at all exterior walls prior to construction, grading or filling. Where the finished ground slopes away from the exterior walls, the reference plane shall be established by averaging the lowest points of the existing ground level within the area between the *building* and the *lot* line or, where the lot line is more than twenty (20) feet from the *building* at a point twenty (20) feet from the *building*.

GENERAL COMMENTS/DISCUSSION:

- Concerns of unintended design consequences associated with changing from finished grade to existing undisturbed grade as it relates to Building Height calculations.

And amend, **Appendix II. Schedule of Dimensional Requirements (Table), Maximum Building Height (Column)**, by adding the following new footnote:

14. The Zoning Board of Appeals is authorized to waive maximum building height by Special Permit in cases where it can be proven that unusual topographic challenges will result in an undesirable architectural design.

GENERAL COMMENTS/DISCUSSION:

- This provision is unnecessary
- Suggested language to be added ... unusual topographic challenges including but not limited to pre-existing excavations, which interrupt the natural flow of the land and will result in an undesirable architectural design.
- Need to define “undesirable”
- Clarify that Special Permit would be subject to Section VIII Special Permit Criteria

And also amend, **Section II., Definitions, Subsection B.**, by adding the new definitions as follows:

28. “**CLEARING**” means the removal or causing to be removed, through either direct or indirect actions, trees, shrubs, sand and gravel, vegetation and/or topsoil from a site, or any material change in the use or appearance of the land. Actions considered to be clearing include, but are not limited to: causing irreversible damage to roots or trunks of trees; destroying the structural integrity of vegetation; and/or any filling excavating or grading.

50. **“GRADING”** means any excavation, *filling* or clearing which alters the existing surface of the land.

GENERAL COMMENTS/DISCUSSION:

- Suggested language to be added to Grading definition ... alters the existing surface of the land except where filling earlier excavations in the land can be proven to be an unnatural interruption in the flow of the land.

53. **“FILLING”** means the act of transporting or placing by any manner or mechanism material to any soil surface or vegetation.

GENERAL COMMENTS/DISCUSSION:

- Add definition of existing, undisturbed or existing ground level (see *Baseline Grade Approaches for Cape Cod Towns* matrix)

Including, the renumbering of **Subsection B.** accordingly to account for adding the above new definitions

Article 2 – Zoning: Restricting Building Construction within Buildable Upland (Amendment)

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Section III. District Regulations, Paragraph D. District Area Regulations, Subparagraph 3. Specific Requirements, a. Minimum Lot Conditions, 1. Upland Requirements,** as follows:

The minimum required area of a *lot*, when used for *building* purposes shall not include land under any water body, below mean high water or within the layout of ways. A buildable *lot* in any zoning district shall contain not less than twenty thousand (20,000) square feet of *buildable upland*, as defined in Section II of this Bylaw, excepting that lots created for *building* purposes prior to May 1, 1984 shall contain not less than ten thousand (10,000) square feet of such *buildable upland* or the minimum *lot area* required in that district if less than ten thousand (10,000) square feet. No *lot* shall be filled to conform with the minimum upland square foot requirement. Structures, notwithstanding those subject to a Special Permit as defined in Section IV. Overlay Districts, Paragraph 3. Special Permit Uses of this Bylaw, shall be constructed only in the *buildable upland* area of a *lot*.

GENERAL COMMENTS/DISCUSSION:

- Suggested language change – replace notwithstanding with either “not including” or “exclusive of”
- The need for such a provision was questioned

Article 3 – Zoning: Inland Conservancy District Setback Requirements

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Appendix II. Schedule of Dimensional Requirements (Table), Minimum Building / Structure Setbacks, Conservancy Districts, Inland (Column),** as follows:

<u>District</u>	<u>Inland (ft)</u>
R 60	<u>2550</u>
R40	<u>2550</u>
R40A	<u>2550</u>
R30	<u>2550</u>
R20	<u>2550</u>
R20A	<u>2550</u>
SB	<u>2550</u>
GB1	<u>2550</u>
GB2	<u>2550</u>
GB3	<u>2550</u>
I	<u>2550</u>
RC3	50
M	N/A
M/C	N/A

GENERAL COMMENTS/DISCUSSION:

- Need for this provision was questioned as it relates to overlap with Conservation Commission Regulations
- Potential increase in the number of nonconforming buildings and structures currently located between 25 and 50 feet of the Inland Conservancy Districts.

Article 4 – Zoning: Delete South Chatham Flexible Development Overlay District

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Section IV. Overlay Regulations, Paragraph D. Flexible Development District**, by deleting **Subparagraph 3. Location, Item e.** as follows:

- e. ~~The **SB (FD) District** in South Chatham as bounded westerly by Route 137, northerly by land of the Town of Chatham from Route 137 to Cockle Cove Creek; easterly by Cockle Cove Creek to Route 28 and southerly by Route 28.~~

Including, the renumbering of **Subparagraph 3. Location** accordingly to account for deleting the above Item

GENERAL COMMENTS/DISCUSSION:

- The FDO District should be looked at Comprehensively

Article 5 – Zoning: Filling and Removal of Natural Cover

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Section III. District Regulations, Paragraph D. District Area Regulations, Subparagraph 3. Specific Requirements, a. Minimum Lot Conditions**, by inserting a new Subparagraph k. Filling and Removal of Natural Cover as follows:

- k. Filling and Removal of Natural Cover

A Special Permit is required for the filling or clearing of vegetation including trees, of an area of more than ten thousand (10,000) square feet. As a condition for granting a permit, the Board of Appeals shall require a landscape plan be submitted specifying the extent of the project, the restoration envisioned and the length of time until completion. The Board of Appeals shall give consideration to the topography of the site, the extent to which the application conforms with the general character of the surrounding neighborhood and assurance of compliance.

GENERAL COMMENTS/DISCUSSION:

- Applicability Questions: MGL Ch. 40 Section 21(17) exemptions - earth removal subject to a duly issued Permits or Licenses (e.g., Building Permit, Septic etc...) or in conjunction with the requirements of a Subdivision Plan approved by the Planning Board and land in public use.
- Recommendations made for the Planning Board to be the SPGA
- Details of landscape plan not specified (e.g., engineer or survey report)
- No reference to Section VIII Special Permit Criteria
- No recognition of considering archaeological resources
- No time component
- No segmentation provision
- Additional grading criteria needed – e.g., adding maximum slope requirements at lot lines
- This section should be expanded to also deal with removal of trees (see *Discussion Draft - Expanded Scope Article 5*)
- Consideration of % of lot as trigger vs. sq. ft. for equity among various lot sizes
- Consideration of a staff level review approach vs. Special Permit.

And amend, **Section II., Definitions, Subsection B.**, by adding the new definitions as follows:

28. “CLEARING” means the removal or causing to be removed, through either direct or indirect actions, trees, shrubs, sand and gravel, vegetation and/or topsoil from a site, or any material change in the use or appearance of the land. Actions considered to be clearing include, but are not limited to: causing irreversible damage to roots or trunks of trees; destroying the structural integrity of vegetation; and/or any filling, excavating or grading.

43. “FILLING” means the act of transporting or placing by any manner or mechanism material to any soil surface or vegetation.

Including, the renumbering of **Subsection B.** accordingly to account for adding the above new definitions

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Barnstable	Grade Plane - A reference plane representing the average of the finished ground level adjoining the building at all exterior walls. The reference plane shall be established by using the lowest points of grade within the area between the building and a point six feet from the building. (<i>Bylaw Definition</i>)	Building Height - The vertical distance from the grade plane to the highest point of a gable, hip or gambrel roof and the highest point of the coping of a flat roof. These height limitations shall not apply to chimneys, cupolas, flagpoles or other similar appurtenances as approved by the Building Commissioner.
Bourne	Grade Plane - A reference plane representing the natural, undisturbed ground level adjoining the proposed building at all exterior walls. Where the ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and a point six (6) feet from the building, or between the building and the lot line, whichever point is closer. (<i>Bylaw Definition</i>)	Building Height - The vertical distance between the highest point of the building or other structure and the average of the elevation of the land that adjoins the building or other structure on all sides, 12' from the building, with that elevation to be based upon the land in its natural state prior to construction, grading or filling, not finished grade. Height limitations shall not apply to chimneys, spires, cupolas, wind energy conversion systems and TV antennas, except as specified in footnote 'n' to Section 2500 Intensity of Use Schedule. Building height shall be determined separately for separate portions of buildings where that separation is articulated by related breaks of three feet or more in both roof and wall planes.
Brewster	Natural Ground (<i>referenced in Height definition</i>)	Height - The vertical distance from the mean level of the adjacent natural ground to the top of the structure, measured at the highest roof beams of a flat roof or the highest gable or slope of a hip roof.
Chatham	Grade Plane - means a reference plane representing the average of finished ground levels adjoining a building or structure at all exterior walls. Where the finished ground slopes away from the exterior walls, the reference plane shall be established by averaging the lowest points within the area between the building and the lot line or, where the lot line is more than twenty (20) feet from the building at a point twenty (20) feet from the building. (<i>Bylaw Definition</i>)	Building Height - means the vertical distance measured from the grade plane to the highest point of a structure or roof surface. Height limitations shall not apply to television antennas, chimneys, spires, cupolas or extensions of structures normally carried above roof lines and which are strictly ornamental in nature.

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Dennis	<p>Finished Grade (<i>Town wide as referenced in Building Height definition</i>) and Average Natural Grade (<i>within the Quivet Neck / Crowes Pasture Resource Protection District as defined in the RPD Building Height definition</i>)</p>	<p>Building Height - The vertical distance between the highest point of the finished grade of the ground adjoining the building and the highest point of the roof. Building Height (RPD) - The vertical distance between the average natural grade of the ground under the footprint of a building and the highest point of the roof, parapet, or other attached structure. A chimney, cupola (four feet or less in height), flagpole, or residential television antenna shall be exempt from the above requirements. Average Natural Grade shall be derived from the average elevation of the natural grade along the exterior of the building facing the front lot line and the average elevation of the natural grade along the exterior of the building facing the rear lot line or, for a through lot, the other front lot line.</p>
Eastham	<p>Naturally Existing Mean Grade (<i>referenced in Building Height definition</i>)</p>	<p>Building Height -- The vertical distance, not to exceed thirty (30) feet, between the highest point of the roof and the average elevation of the naturally existing mean grade (the measurements taken at the corners of the structure) prior to any excavation, leveling, grading, or filling at the building foundation, exclusive of chimneys, air shafts, ventilators, vents, lightning rods not exceeding twelve (12) inches in height, or similar items which may be of the height required for proper operation or use. Building height applies to all buildings and/or structures. The building shall remain in compliance with the height requirement after final grading.</p>

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Falmouth	Mean Level of Natural Grade - (<i>referenced in Building Height definition</i>)	Building Height - For community service uses and public buildings, "building height" is defined as the vertical distance from the mean level of natural grade across the actual building line, across all street sides of the proposed building to the highest point of the roof or parapet for flat or shed roofs, to the deckline for mansard roofs and to the mean height between eaves and ridge for gable, hip and gambrel roofs, and such measurement to be based on the elevation of the lot in its natural state prior to construction, grading or filling. For all other buildings, "building height" is defined as the vertical distance from the mean level of natural grade across the actual building line across all street sides of the proposed building to the highest point of the roof or parapet for flat or shed roofs, to the deckline for mansard roofs and to the ridge for gable, hip and gambrel roofs, with such measurement to be based on the elevation of the lot in its natural state prior to construction, grading or filling.
Harwich	Pre-Existing Grade (<i>referenced in Building/Structure Height definition</i>)	Building/Structure Height - The height of a building or structure shall be calculated by averaging the distance between the lowest pre-existing grade point at the base of the building/structure and the top of said structure, and the distance between the highest pre-existing grade point at the base of the structure and the top of said structure. A structure shall include such elements as a rooftop deck, fence, railing, widow's walk, or other rooftop structure, parapet, or other attached structure. A cupola not larger than four feet in width and chimneys shall be exempt from the above requirements if they do not extend more than four feet in height above the roof. For developed lots, pre-existing grade shall be determined by calculating the average of existing high and low grade points at the base of the existing/original building or structure and top of said structure, where the highest point is at a minimum of eight inches below the top of foundation.

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Mashpee	Average Original Grade of the Land (referenced in Maximum Building Height definition)	Maximum Building Height - These height restrictions shall not apply to chimneys, water towers, skylights and other necessary features appurtenant to buildings which are usually carried above roofs and are not used for human occupancy nor to wireless or broadcasting towers and other like unenclosed structures, except that when any structure or portion of a structure is proposed to exceed forty (40) feet in height, construction shall require a Federal Aviation Administration (FAA) Determination of No Hazard or evidence of exemption for the determination process. Other than for those items excepted above, height shall be measured from the average original grade of the land adjacent to the foundation line of any proposed structure (prior to the clearance of the natural vegetation from said site) to any applicable point on a structure. Except for a traditional widow's walk of up to one hundred (100) square feet in area, roof decks will be permitted only if located directly on top of the first or second story of any building.
Orleans	Average Undisturbed Existing Natural Grade (referenced in Building Height definition)	Building Height - The vertical distance from the average undisturbed existing natural grade at the foundation on the street side of the building to the top of the ridge. Except as otherwise provided in Section 164-40-2-B, or Section 164-35.1 D. Non-Commercial Wind Facilities, the only portions of a structure permitted above the ridge line shall be chimneys, air conditioning equipment, skylights, ventilators and antennae and other like features appurtenant to buildings which are usually carried above roofs and are not used for human occupancy and which in no event shall exceed 5 feet above the ridge line.

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Provincetown	Natural Grade - the existing grade or elevation of the ground surface prior to human-made alteration. To determine the applicable natural grade, which may not be artificially heightened to raise the elevation of a structure, the critical topographical data shall be provided as required by the Building Inspector. (<i>Bylaw Definition</i>)	Building Height - the vertical distance between the highest point of the roof and the natural mean grade as measured from the natural grade at the four (4) furthest corners of the structure to the height of the highest point of the roof, and dividing the aggregate number of these heights by four (4). Height limitations shall not apply to chimneys, TV antennae with poles of ten (10) feet or less, or spires, cupolas and widow walks that do not enclose more than thirty-five (35) square feet of floor space or exceed ten (10) feet in height or occupy more than five (5) percent of the roof area.
Sandwich	Mean Existing Grade (<i>referenced in Building Height definition</i>)	Building Height - The vertical distance from the mean existing grade at the front line of the building to the highest point of the roof for flat or shed roofs, to the deck line for mansard roofs and to the ridge for gable, hip and gambrel roofs. Not included are spires, cupolas, TV antennae and other parts of structures, which do not enclose potentially habitable floor space.

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Truro	<p>Grade, Existing - The vertical elevation of the ground surface that exists prior to any excavating or filling as defined by the most recent USGS topographical maps, except in the case where, by Planning Board approval, excavating or filling has occurred in the construction of a road. In these cases, finished grades, according to the approved plan, shall be used. <i>(Bylaw Definition)</i></p> <p>Mean Ground Level - Where the finished ground level varies in elevation on different sides of a building, the average of the various elevations at the centers of the four main sides. In the case where fill has been used to raise the finished ground level on a side(s) of the building to an elevation higher than the preconstruction ground level, on those sides the measurement shall be taken from center of that side ten (10) feet out from the side of the building. Further, the finished grade of the fill, within one hundred (100) feet of the building shall not have a grade steeper than ten per cent (10%) (one foot of drop for every ten foot run). <i>(Bylaw Definition)</i></p>	<p>Building Height - The vertical distance from <i>mean ground level</i> to the highest point of the coping of flat roof, or to the deck line of a mansard roof, or, subject to the limitation imposed elsewhere in this bylaw, to the mean height level between eaves and ridge for gable, hip, and gambrel roofs.</p>
Wellfleet	<p>Average of the Mean Ground Level Existing Grade <i>(referenced in Building Height definition)</i></p>	<p>Building Height - The vertical distance from the highest point of the roof to the average of the mean ground level existing grade of all sides of the building, such measurement to be based on the elevation of the lot in its natural state prior to construction, grading or filling.</p>

Baseline Grade Approaches for Cape Cod Towns

<u>Town</u>	<u>Baseline Grade Reference(s)</u>	<u>Building Height Definition</u>
Yarmouth	<p>Average of the Grade of Each Street Front <i>(referenced in Building Height definition)</i></p> <p>Above Ground Level (AGL) – A measurement of height from the natural grade of a site to the highest point of a structure. <i>(Bylaw Definition)</i></p>	<p>Building Height - shall be measured from the street side of a structure. When a structure faces on more than one street the height shall be measured from the average of the grade of each street front. Where the grade at other faces of the building is lower than that of the street side, the height of the building above the lowest grade shall not exceed the allowable height by more than ten (10) feet. This will not affect the restrictions described above for building height as measured from the front of the building along average grade. Height limitations shall not apply to chimneys, spires, cupolas, antennas, or other similar structures not intended for human occupancy.</p>

EXPANDED SCOPE ARTICLE 5
FOR DISCUSSION PURPOSES

Article 5 – Zoning: Filling, Soil Removal, Removal of Natural Cover and Tree Protection

To see if the Town will vote to amend its Protective (Zoning) Bylaw, **Section III. District Regulations, Paragraph D. District Area Regulations, Subparagraph 3. Specific Requirements, a. Minimum Lot Conditions**, by inserting a new Subparagraph k. **Filling, Soil Removal, Removal of Natural Cover and Tree Protection** as follows:

k. Filling, Soil Removal, Removal of Natural Cover and Tree Protection

A Special Permit from the Planning Board is required for the filling or clearing of vegetation including trees, of an area ten thousand (10,000) square feet or more. Projects under ten thousand (10,000) square feet and not subject to the below noted exemptions shall be reviewed by the Community Development Department (CDD) in accordance with the provisions of this Section.

1. Submission Requirements

As a condition for granting a permit, the Planning Board shall require a Landscape Plan be submitted specifying the extent of the project, the restoration envisioned and the length of time until completion. The Landscape Plan submitted for approval shall include the following:

- a. Plan prepared by a registered land surveyor or professional engineer at a scale of 1"=40' with existing and proposed 2 foot contours showing the limits of clearance.
- b. Healthy trees with a *diameter at breast height (dbh)* in excess of 10" shall be located and identified by species and size.
- c. Location of endangered species as identified by Massachusetts Natural Heritage and Endangered Species Program (NHESP).
- d. Delineation of highly erodible soils from the U.S. Department of Agriculture Natural Resources Conservation Service.
- e. Response from the Massachusetts Historical Commission (MHC) regarding the potential for archaeological resources on the site.
- f. Construction schedule describing timing of work.
- g. Description of *Best Management Practices (BMPs)* to be used.
- h. Erosion Control Plan indicating sequence of construction and timeframe for permanent soil stabilization and provisions for temporary winter stabilization measures.

2. Review Criteria

The Planning Board shall give consideration to the existing and proposed topography of the site and the extent to which the application conforms to the general character of the surrounding neighborhood. In addition to the Review Criteria for Special Permits set forth in Section VIII in this Bylaw, the following criteria shall be used in the review of all

Special Permits for **Filling, Soil Removal, Removal of Natural Cover and Tree Protection** to the extent the Landscape Plan:

- a. Minimizes site alteration and land clearing to the limited extent possible.
- b. Minimizes clearing for utility trenches and minimize root system damage by cutting rather than ripping.
- c. Minimizes impacts on hilltops and/or scenic views by encouraging development to blend with existing topography.
- d. Protects wildlife habitat by minimizing clearance.
- e. Avoids archaeological resources
- f. Preserves specimen trees in excess of 10 inches where possible by preserving their root zones. Replacement tree(s) may be required where the Board or CDD deems the loss of a specimen tree to be significant.
- g. Limits finished grades to no greater than 2:1 while preserving and blending with adjacent land.
- h. Ensures that **BMPs** are used.
- i. Protects the site using adequate erosion and sedimentation controls.
- j. Revegetates the site immediately after grading.
- k. Provides adequate performance guarantee prior to site clearance.

3. Exemptions

The following uses/activities shall be exempt from the provisions of this subparagraph, **Filling, Soil Removal, Removal of Natural Cover and Tree Protection**:

- a. Activities associated with exempt uses covered under MGL Chapter 40A, Section 3.
- b. Work conducted in conjunction with duly authorized permits or licenses, definitive subdivision approval, and on public lands as noted in MGL Chapter 40 Section 21(17).
- c. Activities permitted under Chapter 136 – Earth Removal of the Chatham General Bylaws.

4. Conditions

The Planning Board may impose conditions upon the approval of a Special Permit for **Filling, Soil Removal, Removal of Natural Cover and Tree Protection** in keeping with the review criteria so the approved project conforms to the general character of the surrounding neighborhood.

And amend, **Section II., Definitions, Subsection B.**, by adding the new definitions as follows:

15. **“BEST MANAGEMENT PRACTICES” (BMPs)** means a structural, nonstructural, or managerial technique recognized to be the most effective and practical means to prevent and reduce nonpoint source pollutants. BMPs should be compatible with the

productive use of the resource to which they are applied, and should be cost-effective.

29. “CLEARING” means the removal or causing to be removed, through either direct or indirect actions, trees, shrubs, sand and gravel, vegetation and/or topsoil from a site, or any material change in the use or appearance of the land. Actions considered to be clearing include, but are not limited to: causing irreversible damage to roots or trunks of trees; destroying the structural integrity of vegetation; and/or any *filling*, excavating or grading.
37. “DIAMETER AT BREAST HEIGHT” (DBH) means the diameter of any tree trunk, measured at 4.5 feet above existing grade.
45. “FILLING” means the act of transporting or placing by any manner or mechanism material to any soil surface or vegetation.

Including, the renumbering of **Subsection B.** accordingly to account for adding the above new definitions

DISCUSSION DRAFT